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グラスウールで断熱された建築壁体内の結露過程解析*

(吸放湿性のある断熱材内で自然対流が生じる場合)

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NUMERICAL ANALYSIS OF MOISTURE CONDENSATION PROCESS IN A BUILDING ENVELOPE INSULATED BY FIBERGLASS (EFFECTS OF MOISTURE ADSORPTION WITH NATURAL CONVECTION)

by

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Abstract

In this paper, the complex problem of simultaneous heat & vapor diffusion and convection in the moisture condensation process of fiberglass is considered. The predicted quasi-steady state distributions of temperature and vapor pressure in fiberglass are estimated. The numerical results of thermal and moisture behavior in fiberglass show the effects of temperature gradient through a fiberglass, aspect ratio, permeability and moisture adsorption in the moisture condensation process.

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